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| APPLICATION NO.   | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------|----------------------|---------------------|------------------|
| 10/735,963  | 12/15/2003           | Jan Lindy Sorensen   | 6567.200-US         | 3391             |
| 23650 7590 04/17/2007<br>NOVO NORDISK, INC.<br>PATENT DEPARTMENT<br>100 COLLEGE ROAD WEST |                      |                      | EXAMINER            |                  |
|   |                      |                      | CHANG, CELIA C      |                  |
| PRINCETON,  |                      |                      | ART UNIT            | PAPER NUMBER     |
|   |                      |                      | 1625                |                  |
|   |                      |                      |                     |                  |
| SHORTENED STATUTOR  | Y PERIOD OF RESPONSE | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS  |                      | 04/17/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| · · · · · · · · · · · · · · · · · · ·  | Application No.  | Applicant(s)   |  |  |  |  |
|--|--|--|--|--|--|--|
|  | 10/735,963   | SORENSEN ET AL.  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit   |  |  |  |  |
|  | Celia Chang  | 1625   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. sely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 01 J  | uly 0125.  |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)☐ This   | action is non-final.   |  |  |  |  |  |
| 3) Since this application is in condition for allowa   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |  |  |
| Disposition of Claims  |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-4,6-8,10-12 and 18-67</u> is/are pending in the application.   |  |  |  |  |  |  |
| 4a) Of the above claim(s) <u>53-67</u> is/are withdrawn from consideration.  |  |  |  |  |  |  |
| 5) X Claim(s) <u>1-4,6-8,10-12 and 18-52</u> is/are allowed.   |  |  |  |  |  |  |
| 6)[] Claim(s) is/are rejected.   |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o   | r election requirement.  |  |  |  |  |  |
| Application Papers   |  |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examine  | er.  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |  |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| •  | •  |  |  |  |  |  |
| Attachment(s)  |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)   |  |  |  |  |  |  |
| 3)' Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:  |  |  |  |  |  |  |

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#### **DETAILED ACTION**

1. Amendment and response filed by applicants dated Jan. 18, 2007 have been entered and considered carefully.

Claims 5, 9, 13-17 have been canceled. Claims 53-67 stayed withdrawn from consideration.

Claims 1-4, 6-8, 10-12, 18-52 are pending.

2. Claims 53-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement or as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention or the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention or the claims.

The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916), where the Supreme Court looked to whether the experimentation needed to practice an invention was undue or unreasonable. *Id.* An invention must be described so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). As stated in the MPEP 2164.01(a) "There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue". The analysis must consider all the evidence related to each of these factors, and any conclusion of nonenablement must be based on the evidence as a whole. *Id.* at 740, *Id.* at 1407. The factors to be considered herein are those set forth as the In re Wands, 8 USPQ 2<sup>nd</sup> 1400 (1988) decision.

The analysis is applied to the instant case.

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# Nature of invention

The claims are drawn to method of treating disease or disorder which are highly unpredictable as compare to the mechanical or electrical art.

## The state of the art and predictability

The claimed scope is treating disorder or disease "related" to H3 histamine receptor, which included both antagonistic and agonistic binding of the claimed compounds to the H3 histamine receptor. Please note that while the functionality of the receptor will be affected by antagonistic or agonistic binding of a compound, a <u>single</u> compound cannot bind the same receptor both agonistically and antagonistically simultaneously.

## The amount of guidance and working examples

While the specification described that the claimed compounds can bind the H3 histamine receptor antagonistically to affect a blockade of the H3 histamine receptor activity; the compound can bind the H3 histamine receptor agonistically to affect an activation of the H3 histamine receptor activity. On pages 79-86 mere testing procedures were disclosed without any guidelines as to which one of the claimed compounds have antagonistic or agonistic activity, how to pick and choose, under what condition such activity may be effected. In absence of any guidelines, one skilled in the art is offered mere language rather than enablement as to "how" to operate the claimed scope, which encompassed both antagonistic and agonistic activity exerted by the compounds simultaneously

Therefore, claims 53-67 as currently presented are not rejoinable to the compound and composition claims or allowable.

3. Compounds and compositions of claims 1-4, 6-8, 10-12, 18-52 are allowed.

Applicants have amended the claims limiting to the elected invention and obviated the rejections under 35 USC 102(b) or 103(a) by limiting R1 to C3-8 cycloalkyl or C5-8 cycloalkenyl.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celia Chang whose telephone number is 571-272-0679. The examiner can normally be reached on Monday through Thursday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie, Ph. D., can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OACS/Chang April 16, 2007 Celia Chang Primary Examiner Art Unit 1625